



**DISTRICT OF HUDSON'S HOPE  
REGULAR COUNCIL MEETING AGENDA**

**AGENDA ADDITION**

Council Chambers

Monday, September 15, 2014 at 7:00 PM

**Staff Reports - CAO**

- SR1 Action Updates
- SR2 Light Industrial Zone
- SR3 Valve Insertion
- SR4 North Peace Airport
- SR5 UBCM Premier/Minister's Briefings

## THE DISTRICT OF HUDSON'S HOPE

**REPORT TO:** Mayor Johansson and Council  
**SUBJECT:** ACTION and other UPDATES  
**DATE:** September 15, 2014  
**FROM:** Tom Matus, CAO

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### **Proposed Light Industrial Zone**

L&M has provided a Preliminary Survey Overall Plan, a separate report is attached.

### **Watermain Valve Insertion Project**

As noted earlier all bids came in over budget. I have spoken with PFC whom did not provide a bid but have stated that they will provide the valves and do the work next year for \$113,500. Separate report provided in this agenda package.

### **BCH Complex Modules**

Signed agreement with BCH and they will use the property from September 25<sup>th</sup> to November 15<sup>th</sup>, 2014.

### **Wm. Beattie sub-division PLA**

Wm. Beattie has withdrawn his sub-division application.

### **Lynx Creek River and Watershed**

As quoted from Deb Epps of MoE as per her email of Friday, September 11<sup>th</sup>:

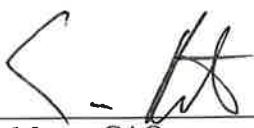
"Meetings have occurred with MOE, FLNRO, Health Authorities, Oil and Gas Commission, and others. It is my understanding that staff are heading out tomorrow [being Friday, September 12<sup>th</sup>, 2014] to investigate and collect samples." I spoke with Greg Tamblyn and he states that tests with rush analysis will take place.

Representatives from FLNRO, BCO&GC and Northern Health arrived on Friday and I accompanied Chelton van Geloven of FLNRO and Reg Marquandt of BCO&GC to take test samples from several locations: what we believe is the source on Brenot Creek, Lynx Creek at end of Powell Road and at several other points on Brenot Creek in and around the area of the slough/"source". A very large amount of material has sloughed into the Brenot Creek, approximately 1,000 cubic meters.

Baseline data exists from 2005 for points at the mouth of Lynx Creek, further up in the headwaters and at the base of the foothill in that baseline data exists for the test sample site for Lynx Creek at Powell Road. We are hoping to get the test results back to us for Monday Night's Council meeting.

### **NEBCRMS**

Colin Griffiths is asking to schedule a meeting for either October 1, or 2<sup>nd</sup>, 2014. Council is asked to choose one of these dates to meet with the NEBCRMC Board.

  
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Tom Matus, CAO

## THE DISTRICT OF HUDSON'S HOPE

**REPORT TO:** Mayor Johansson and Council  
**SUBJECT:** L&M: Light Industrial Area Preliminary Survey Plan  
**DATE:** September 15, 2014  
**FROM:** Tom Matus, CAO

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I received the following report from L&M in regard to the Light Industrial Survey Plan we commissioned L&M to complete. They have completed a Preliminary Survey Plan which shows survey control points. This is not the survey plan which would be used to register with the LTA as this is a *proposed* survey plan.

Curtis Saunders writes as follows:

*"Please find attached the survey plan with ground contour elevations shown. The plan is to scale.*

*The land is generally flat, and typically ranges from elevation 514m - 516m on the lots. Current tree cover was very dense on conceptual Lots 12-18, and more open on Lots 1-11 You'll note that some minor adjustment may be required to Lots 1-3, as the bottom of slope of a sand dune does encroach slightly. In addition, we have overlaid the previous consultant's road concept, however we would recommend changes be made to both improve the intersection alignments (at Powell Road and Jamieson Avenue) as well as modify several of the lot lines.*

*The plan is a good starting point from which L&M can now perform several of the next steps, as the District may so decide, including:*

- Perform several geometric improvements to the conceptual roadway alignments;*
- Calculate rough order of magnitude quantities and cost estimates;*
- Prepare a Crown Land Application report on behalf of the District;*
- Once land is acquired, assist the District with the Rezoning Process, and conceptual design process;*
- Prepare a Traffic Impact Study (TIS) as required by the Ministry of Transportation. This will be a condition of the rezoning application;*
- Once rezoning is obtained, assist the District with the subdivision application, layout phasing plan and the detailed design process as the Engineer-of-Record;*
- Following receipt of a PLA, prepare detailed probable construction cost estimates, prepare contract documents and issue the plans for tender to regional contractors;*
- Recommend a contractor based on bids received;*

- Proceed to construction and monitor the progress;
- Following construction, facilitate the subdivision registration of lots at the LTO, thereby creating market-ready fee simple lots;
- Prepare a marketing brochure for the District to issue to potential realtors or interested buyers.

*I trust this outline will give the District and Council a good idea of the next steps required to achieve the goal of creating Light-Industrial zoned lots in Hudson's Hope.'*

We will be discussing this issue with Minister Shirley Bond at the UBCM.

I am also working with personnel from the ministries of FLNRO, JTST and CSCD to research assistance avenues in developing this site.

I will keep Council informed as to any and all developments of this project.

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Tom Matus, CAO



## REQUEST FOR DECISION

<b>RFD#:</b> IC 7SR	<b>Date:</b> September 15, 2014
<b>Meeting#:</b> CM091514	<b>Originator:</b> Tom Matus, CAO
<b>RFD TITLE:</b> Valve Insertion	

### **BACKGROUND:**

The District has recently tendered Valve insertion and excavation for the Valve Replacement Project; closing August 29, 2014.

### **DISCUSSION:**

Bids were received and presented to Council at the September 2, 2014 Council meeting. All bids were over budget. We have determined that discussion with the bidders would be fruitless.

We have discussed with Pacific Flow Control, (who did not bid), to provide 16 valve insertions for the cost of \$113,500.00 plus taxes but they cannot do the insertions this year as the arrival of the valves from the factory will take 6-8 weeks putting the actual labour into November, too cold. They will hold the price for us until next year. They claim a quote of \$107,000.00 was provided in July of 2013.

Administration proposes to Council that we purchase the valves immediately so we can have them ready to insert, by PFC, next year. This would increase the costs of the project but not to the extent of the bids, and possible save on freight expenses.

### **BUDGET:**

\$113,500.00 charged to the Water Capital Works Reserve Fund.

This will reduce the amount budgeted to spend in the 2014 budget but increase the overall total expense of the project over the 2014 and 2015 fiscal years.

Jason Young had provided a cost of \$323,940.00 approximately \$10,000.00 over his 2012 bid. We can discuss the price with him as we will only need to do the asphaltting for highway 29. This would reduce the expense as we can defer all other asphaltting to a later date.

There is the option of our own crew doing the excavating or assisting in some way. Will look at this next year.

### **RECOMMENDATION / RESOLUTION:**

That:

Council approve the expenditure of \$113,500.00 plus taxes as per the Pacific Flow Control Ltd quote for the purchase of the 16 live insertion valves for insertion in the 2015 fiscal year.



Tom Matus, CAO

## Tom Matus

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**From:** PFC <pfcltd1@telus.net>  
**Sent:** September-09-14 2:54 PM  
**To:** Tom Matus  
**Subject:** FW: Hudson's Hope Inserts  
**Attachments:** Hudson's Hope Inserts.pdf

Hello Tom

As promised, attached is our most recent quote on the inserts made to IDL for your records.

Louise Boyko  
pfcltd@telus.net  
Pacific Flow Control Ltd.  
(604) 888 6363 or 1 800 585 8277  
[www.pacificflowcontrol.ca](http://www.pacificflowcontrol.ca)

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**From:** PFC [mailto:pfcltd1@telus.net]  
**Sent:** Tuesday, August 26, 2014 2:28 PM  
**To:** 'wdenluck@idlprojects.com'  
**Subject:** Hudson's Hope Inserts

Hi Wayne

Your quote as requested.  
Please contact us with any questions you may have.

John Mackenzie  
Pacific Flow Control Ltd.  
[pfcltd@telus.net](mailto:pfcltd@telus.net)  
(604) 888-6363 or 1 800 585 8277  
[www.pacificflowcontrol.ca](http://www.pacificflowcontrol.ca)



## **PACIFIC FLOW CONTROL LTD.**

P.O. BOX 31039, RPO Thunderbird  
Langley, B.C. V1M 0A9

Phone: 604 888 6363 Fax: 604 882 9796  
TOLL FREE: 1 800 585 TAPS (8277)  
Email: [pfcltd@telus.net](mailto:pfcltd@telus.net)  
Web Site: [www.pacificflowcontrol.ca](http://www.pacificflowcontrol.ca)

PROPOSAL SUBMITTED TO: ~~IDL-projects~~ **DHH**  
REQUESTED BY: Wayne Denluck  
ADDRESS:  
PHONE:  
FAX:  
JOB LOCATION: Hudson's Hope  
PREPARED BY: Louise Boyko  
DATE: August 25, 2014

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We hereby submit specifications and estimates for:

Supplying technicians, equipment and material for 7 – 6" and 9 – 8" Quikvalve's on existing AC pipe operating at less than 150 psi. Includes epoxy coated sleeves and inserts w/ alloy hardware, installation, testing and mobilization.

\$113,500.00 + GST – net 30 days

Notes:

- Material is not stock. Allow 6 – 8 weeks delivery ARO
- Quote is valid for 90 days
- Due to delivery times for materials from factory we will not be able to meet the October 9<sup>th</sup> deadline for completion of work.
- Working range of sleeves is very limited. Please provide exact O.D.'s of existing before ordering
- Quote is based on maximum 8 consecutive days on site. Allow \$1650.00 for each additional day including standby/weekend shutdown if any
- Once ordered from factory, a restocking fee of \$1655.00 for each 6" valve and \$1988.00 for each 8" valve will be applied if cancelled or wrong O.D's provided
- It is recommended to encase new valve in concrete for maintaining integrity of the AC pipe and allow for restraint if pipe is ever cut nearby to prevent pipe pullout at existing collars
- Contact our office for minimum trench requirements



## REQUEST FOR DECISION

<b>RFD#:</b> CM 7SR	<b>Date:</b> September 15, 2014
<b>Meeting#:</b> CM091514	<b>Originator:</b> Tom Matus, CAO
<b>RFD TITLE:</b> North Peace Airport Borrowing	

### **BACKGROUND:**

The NP Airport Society has undertaken some major capital works and to do so has borrowed the funds.

### **DISCUSSION:**

#### **As per Kim French of the PRRD:**

The release of funds for the recent loan for the parking lot project that is wrapping up now is being held up until the mortgage is registered. This has proven to be a very long, onerous process since it is owned by a Society, operated by a corporation, with “members” being 4 local governments and the “directors” being 10 appointed people representing 5 jurisdictions.

So, where we are right now is at the “end” of the mortgage process and it noted by our legal counsel that we do not have “member” resolution which is required for the Society “Special Resolution” that was done for the borrowing and signed by all 10 Directors.

Therefore, what is required (per the information below in red from our legal representative) is one of the two options.

The second option works only if there is a specific resolution from your Council delegating the person to the “Society” to act on behalf of your local government.

For the Regional District, the representative are just appointed the same as any Committee appointment so it therefore requires a Board resolution (pdf attached that will be on next week’s agenda).

If you have a resolution that you believe would suffice could you please send it to me and I will send to our lawyer to confirm. And if not would it be possible to get a report to your Board ASAP since this should be the final issue that is holding up funds being released.

**Option 1: While the Directors may be representatives of the member local governments, they are acting in their capacity as Directors and any resolutions they pass are Director’s Resolutions. Authorization for borrowing must come in the form of a member’s special resolution, and there must be evidence that the member’s approved the special resolution. That evidence will either be by voting at a general meeting, or by written consent.**

**The written consent would come from either the person delegated by the council of a given member local government (this person may be the CAO, but will depend on the delegation), or the Council itself**

**through a resolution.** I have attached sample wording for both a Resolution to be passed by the Council (or RD Board), or where a person has been delegated to act on behalf of the local government for the purposes of its membership in the Society, the written consent.

**It will only be okay to not go to the Council or Board where a person has been properly delegated (through a general delegation bylaw or a delegation specific to the Society). It may be that the same person appointed as a Director for the Society is the same person delegated to act on behalf of the local government as a member of that Society.**

**BUDGET:**

N/A.

**RECOMMENDATION / RESOLUTION:**

That Council motion the following:

WHEREAS the District of Hudson's Hope Municipal Corporation is a member of the North Peace Airport Society (S-0036167) (the "Society");

AND WHEREAS the Society desires to borrow funds, in the form of a collateral mortgage, of up to \$15,000,000.00, from the Canadian Imperial Bank of Commerce ("CIBC").

The Council of District of Hudson's Hope hereby resolves that the Corporation of the District of Hudson's Hope approves and consents to the Society borrowing of up to \$15,000,000.00 from the CIBC, and the granting to the CIBC of a mortgage and general assignment of leases and rents as security for the funds.



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Tom Matus, CAO



## **Premier/Ministers' Briefings:**

### **Premier Christie Clark**

#### **Site C:**

1. Legacy Agreement: not signed by HH?
2. GIL: specific legislation for HH?
3. River front property: change from residential (choice property) zoning to farmland zone status;
4. Taxes-in-lieu (there was massive infrastructure investments in the town site when Williston/ WAC B was established as water/ sewer/ roads/ rec/ swimming pool) but very little contribution since;
5. BCH employee (and their families) numbers resident in the community has dropped steadily over the last 30 years
6. cumulative impacts upon the community's natural beauty and built assets;
7. The sterilization of lands within the community for future development. This would of course complement your bullet on lost property tax revenue;
8. Agricultural land losses and impacts to traditional community economic activities.
9. BCUC review – Mayor's Open Letter to Premier?

### **Ministry of FLNRO – Steve Thomson**

1. Wells / water quality: wells failed three years ago when fracking was going on at that time.
2. Light industrial Crown Reserve – purchase and or of lands thereof.
3. Parks & Open Space Tenure
4. Access to water in those lines going through private land in Beryl Prairie. Julie Robinson, in the FSJ office, was going to look into what the roadblock was when it was attempted at the time the line was put in. I'll need to call her to see if she has made any progress.

### **Ministry of Jobs Tourism Skills Training – Shirley Bond**

#### **Light Industrial Area: Highway 29**

Discussion on the feasibility and logistical factors of a light industrial zone located on Highway 29 east of Jamieson Ave crossing stretching 1.5 kilometers east and 150 meters deep along Highway 29. The following observations are made:

- 1 Perform several geometric improvements to the conceptual roadway alignments;
- 2 Calculate rough order of magnitude quantities and cost estimates;
- 3 Prepare a Crown Land Application report on behalf of the District;



**HUDSON'S  
HOPE**  
*PLAYGROUND OF THE PEACE*

Box 330  
9904 Dudley Drive  
Hudson's Hope BC V0C 1V0  
Telephone 250-783-9901  
Fax: 250-783-5741

- 4 Once land is acquired, assist the District with the Rezoning Process, and conceptual design process;
- 5 Prepare a Traffic Impact Study (TIS) as required by the Ministry of Transportation. This will be a condition of the rezoning application;
- 6 Once rezoning is obtained, assist the District with the subdivision application, layout phasing plan and the detailed design process as the Engineer-of-Record;
- 7 Following receipt of a PLA, prepare detailed probable construction cost estimates, prepare contract documents and issue the plans for tender to regional contractors;
- 8 Recommend a contractor based on bids received;
- 9 Proceed to construction and monitor the progress;
- 10 Following construction, facilitate the subdivision registration of lots at the LTO, thereby creating market-ready fee simple lots;
- 11 Prepare a marketing brochure for the District to issue to potential realtors or interested buyers.
- 12 location of buffer zone: either north or south of newly constructed ROW or buffer zone being part of the lot;
- 13 can ROW run adjacent to Hwy 29 ROW (sharing the ditch);
- 14 invite Moberly Development Corporation to Public Open House;
- 15 determine location of services (front or back of building);
- 16 determine the cost of running sewer line 115 meters or cost of running water & gas lines 115 meters;
- 17 will need 3 phase electricity;
- 18 Total cost of all service lines installation for 1 kilometers and 1.5 kilometers
- 19 Determine length of industrial zone: end at Powell St for now or continue on the full length of the 1.5 kilometers;
- 20 Determine meter cost of water/sewer services
- 21 Intersection may need to be constructed where Taylor Ave would intersect Highway 29
- 22 Survey Plans for submission to LTSA

### **Ministry of Community, Sports and Culture Development – Coralee Oakes**

1. NEBC Coalition

### **Ministry of Education – Peter Fassbender**

1. Bussing

### **Ministry of Health – Terry Lake**

1. Doctor's salary
2. Ambulance: para-medicine model: HH being a trial area?



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**Ministry of Agriculture – Norm Letnick**

1. ALC: Removal of lands from ALR for Light Industrial or Commercial use



## **Open Letter to BC Premier Christy Clark**

July 15<sup>th</sup>, 2014

The Honourable Christy Clark  
Premier of British Columbia  
P.O. Box 9041 Stn. Prov. Govt.  
Victoria, B.C. V8W 9E1

Dear Premier Clark,

**Re: British Columbia Utilities Commission Review of Proposed Site C Dam Project**

I am writing to urgently request that you refer the proposed Site C Dam Project to the British Columbia Utilities Commission (BCUC) for further review of project costs, alternatives to Site C, and related issues prior to making a decision on this project.

### ***Prudent Fiscal Management Requires Further Review of Site C***

The District of Hudson's Hope, a community of 1,100 people in the heart of the Peace River Valley, will be more adversely impacted than any other municipality by the proposed Site C dam.

Understandably, we wish to ensure that these adverse community and environmental impacts and the \$7.9 billion cost of the proposed Site C project are justified and necessary for meeting British Columbia's future electricity needs.

The proposed \$7.9 billion Site C project may also be the largest provincial public expenditure of the next 20 years, adding over 10% to our growing \$62 billion provincial debt. BC taxpayers, whether they live in Hudson's Hope, Penticton, Surrey, Comox, Coquitlam, Prince George, Vancouver, Delta, Victoria or any other BC community, reasonably expect the government to subject Site C project costs and alternatives to open, rigorous and independent review with full procedural safeguards before committing to such a large capital expenditure.

Rating agencies such as Moody's call this prudent fiscal management. When Moody's reaffirmed B.C.'s triple-A credit rating in May of this year, it was accompanied by a negative outlook due to accumulation of provincial debt. Moody's said,

"The negative outlook reflects the risks to the province's ability to reverse the recent accumulation in debt given a softened economic outlook, weaker commodity prices and continued expense pressures."

What better way to demonstrate prudent fiscal management than to subject Site C project costs and alternatives to open, rigorous and independent scrutiny by the BCUC?

Yet this is not what has happened - at least to date. The Site C Joint Review Panel (JRP) was prevented by a combination of BC law, public policy, terms of reference, and a lack of information from fully scrutinizing key project elements including project costs and alternatives to Site C<sup>1</sup>. However, this did not prevent the JRP from flagging its concerns about project costs:

"The Panel cannot conclude on the likely accuracy of Project cost estimates [by BC Hydro] because it does not have the information, time or resources. This affects all further calculations of unit costs, revenue requirements and rates."

Or asking questions about alternatives such as natural gas:

"Finally, if it is acceptable to burn natural gas to provide power to compress, cool, and transport B.C. natural gas for Asian markets, where its fate is combustion anyway, why not save transport and environmental costs and take care of domestic needs?"

To ensure proper scrutiny, the JRP recommended on May 1<sup>st</sup>, 2014 in its 457 page final report that a number of matters be referred to the BCUC for further review<sup>2</sup>. The JRP noted, "...available resources could provide adequate energy and capacity until at least 2028" and accordingly there is time available for the BCUC to do this work.

However, Minister of Energy and Mines, Bill Bennett was quick to dismiss further scrutiny. On May 8<sup>th</sup>, 2014, the same day as the report's public release, Minister Bennett said:

"...I think that the work has been done and I think subjecting it to another review after all the years the project has been studied is not a good use of public money..."

Madame Premier, this defies prudent fiscal management. BC needs to complete its homework on Site C.

Hudson's Hope, BC taxpayers and rating agencies such as Moody's need to be fully satisfied that this \$7.9 billion project will not be characterized as a white elephant that transformed the beautiful Peace River Valley into a dam reservoir, increased the provincial debt by over 10%, and put BC's strong fiscal management record at risk.

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<sup>1</sup> JRP findings:

- The Panel concludes that, basing a \$7.9 billion Project on a 20-year demand forecast without an explicit 20-year scenario of prices [by BC Hydro] is not good practice. Electricity prices will strongly affect demand, including Liquefied Natural Gas facility demand.
- The Panel concludes that demand management does not appear to command the same degree of analytic effort [by BC Hydro] as does new supply.
- The Panel concludes that a failure [of BC Hydro] to pursue research of the last 30 years into B.C.'s geothermal resources has left BC Hydro without information about a resource that BC Hydro thinks may offer up to 700 megawatts of firm, economic power with low environmental costs.

<sup>2</sup> Please refer to JRP recommendations 46,47,48 and 49.



### ***Urban Systems Report Supports Need for BCUC Review***

Recognizing these major uncertainties, the District of Hudson's Hope retained Urban Systems Ltd. to review the findings of the JRP Report, and compile information from the proposed project's Environmental Impact Statement, BC Hydro's Integrated Resource Plan, and other relevant resources and data to examine the following key question:

Are the anticipated community and environmental impacts, and high-costs of the proposed Site C project justified and necessary for meeting British Columbia's future electricity needs?

We are attaching a copy of the Urban Systems report entitled, "*A Review of the Proposed Site C Clean Energy Project: Exploring the Alternatives*" for your consideration.

The JRP concluded that BC Hydro has not fully demonstrated the need for this project on the timetable set forth and Urban Systems has also concluded that a commitment to the proposed Site C project is likely premature:

"The material cited within this document suggests that a commitment to the proposed Site C project is likely premature before the British Columbia Utilities Commission undertakes a review of the proposed project costs and long-term energy needs, including the comparative costs and benefits of potential alternatives. And as the JRP notes there is time to do this work. "

Urban Systems reviewed 5 alternative scenarios to Site C including retrofits and upgrades, geothermal, other renewables and enhanced demand side management, natural gas/cogeneration, and emerging technologies. Urban Systems concludes:

"...there are likely alternatives which could be cost-competitive and viable to meet future electricity needs."

A preliminary comparison of selected alternatives to Site C suggests that BC could pursue these alternatives and potentially save over \$ 5 billion in project costs. The "accumulation of debt" by the province would be significantly reduced. Please refer to Table A.

Finally, Urban Systems cautions that emerging trends could result in a risk to ratepayers:

"Three trends are occurring simultaneously that could substantially reduce the need for the proposed Site C project and affect BC Hydro's forecasted revenues, thus limiting its ability to pay for such an asset over its 70 year amortization period. These three trends include: increases in BC Hydro electrical rates, the decreasing cost of solar photovoltaic (PV) modules, and the commercialization of micro grid enabling technologies."

**Conclusion**

With the benefit of the information contained in this letter, I urge you to do what is fiscally prudent and makes common sense - refer the proposed Site C project to the BCUC for open, rigorous and independent review of project costs, forecasted revenues and less costly alternatives to Site C prior to making a decision on this project.

To do anything less for the largest and most expensive public project in BC in the next 20 years is imprudent, especially for a government that prides itself on its triple-A credit rating.

I would appreciate a written response from you by July 31<sup>st</sup>, 2014.

Sincerely,

A handwritten signature in dark ink, appearing to read "Gwen Johansson", followed by a long horizontal line.

Mayor Gwen Johansson

**Table A**  
**Comparison of Capacity & Cost of Selected Potential Alternatives to Site C<sup>1</sup>**

	<b>Proposed Site C Project</b>	<b>Mica Dam 2 New Turbines</b>	<b>Natural Gas Fired Generation<sup>2</sup></b>	<b>Burrard Thermal Upgrade</b>	<b>Solar</b>	<b>Geothermal</b>
<b>Capacity</b>						
Megawatts(MW)	1,100	1,000	1,100	875	1,100	1,100
Terawatt hours per Year	5.1			6.1		
<b>Capital Cost</b>						
Estimated Total Capital Cost	\$7.9 billion to \$10.3 billion	\$800 million	\$1.9 billion	\$1.0 billion	\$2.50 billion	\$2.75 billion
Potential Savings	-	\$7.1 billion to \$9.5 billion	\$6.0 billion to \$8.4 billion	\$6.9 billion to \$9.3 billion	\$5.4 billion to \$7.8 billion	\$5.15 billion to \$7.55 billion
<b>Provincial Debt</b>						
Estimated Cost as % of Provincial Debt (\$62 billion)	12.7% to 16.6%	1.3%	3.1%	1.6%	4.0%	4.4%
<b>Unit Cost of Electricity</b>						
Target Cost per Megawatt Hour (MWh)	\$110 per MWh	To be determined	\$30 per MWh	To be determined	\$60 per MWh	\$ 88-92 MWh
Potential Savings <sup>3</sup>		-	73%	-	45%	16-20%

<sup>1</sup> This Table was prepared by Hudson's Hope to illustrate the potential cost and provincial debt implications for a sample of alternatives to Site C.

<sup>2</sup> This estimate is based on the Shepard Energy Facility near Calgary, Alberta. The potential savings under this scenario are significant and thereby leave room for investment in emission reduction technologies and carbon offsets, as well as mitigation strategies to address potential natural gas price fluctuations.